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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,363

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Bartholomeus Trommelen

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EXAMINER

ARNADE, ELIZABETH AMALIA

ART UNIT

PAPER NUMBER

4122

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DELIVERY MODE

01/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,363	Applicant(s) TROMMELEN ET AL.	
	Examiner ELIZABETH ARNADE	Art Unit 4122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-14 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/06/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/17/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6 and 8-14, drawn to the process for the automatic control of the thickness of extruded film.

Group II, claim(s) 7, drawn to a device for the automatic control of the thickness of extruded film.

The inventions listed as Group I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I and II lack of unity of invention because even though the inventions of these groups require the technical feature of a computer and storage unit, this technical feature is not a special technical feature as it does not make any contribution over the prior art in view of Akasaka, European Patent No. EP0329157B1 as well as the prior art disclosed in the current application. Akasaka discloses in the summary of the invention a film thickness controller for use in an extrusion molding device comprising a computer

and storage unit (pg 4, lines 37-48). The prior art disclosed within the current application also teaches the use of a computer and storage unit in modern extrusion processes (pg 1, lines 19-32). In view of the prior art, the technical feature of a computer and storage unit is anticipated and therefore lacks novelty.

During a telephone conversation with Mr. Harvey B. Jacobson, Jr. on December 11th 2008 a provisional election was made with traverse to prosecute the invention of Group II, claim 7. Affirmation of this election must be made by applicant in replying to this Office action. Claim 7 is withdrawn from further consideration by the examiner, 37 CFR 1.142 (b), as being drawn to a non-elected inventions.

Specification

1. The abstract of the disclosure is objected to because it is not limited to one paragraph. Correction is required. See MPEP § 608.01(b).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure. **The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words.** It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract

should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to since it is greater than 150 words in length. Correction is required. Additionally, remove the wording '(figure 1)' and the '[see source for figures]' as this reference is not needed in the abstract.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-6 and 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

It is unclear what is meant by the applicant in regards to claim 1 wherein it states "that during a predetermined time-frame at the start of the extrusion process, measured

values or information derived therefrom using or for a greater number of measuring cycles is made accessible to the computer (14) than those recorded by the thickness-measuring probe (12) in a time-frame of similar length during the normal operation and that”.

The claims are replete with indefinite language not supported by the disclosure. The listing below is exemplary of the types of errors present and not necessarily an exhaustive listing. Therefore, please review the claims and amend accordingly for compliance with 35 U.S.C 112, second paragraph.

The terms “greater”, “more quickly”, “larger” and “normal” in claims 1 and 2 are relative terms which render the claim indefinite. The terms “greater”, “more quickly”, “larger” and “normal” are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is indefinite as to how many more measuring cycles are taken into account in relation to an exact reference point as pertains to claims 1 and 2. Similarly it is indefinite as what degree the thickness measuring probe moves in relation to an exact reference point. Additionally the exact reference point is not clearly defined in the claim.

In regards to claims 4, 5, 9, and 10 it is indefinite as to the subject matter meant by the terms "weighting factors". The "weighting factors" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and

one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Additionally claims 4, 9 and 10 fail to point out what is included or excluded by the claim language. The term “various” is indefinite as it does not offer any boundaries to the limitation set forth.

As best understood and in order to provide a complete action, claims 1-6 and 8-14 are further rejected under the prior art rejection below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-14 rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Akasaka, European Patent No. EP0329157B1.

In regards to claim 1, applicant admits all the recited features of the preamble (Specification, pg 1, line 19 to pg 2, line 5). Following the preamble applicant states his claimed invention is characterized in that “during a predetermined time-frame at the start of the extrusion process, measured values or information derived therefrom using or for a greater number of measuring cycles is made accessible to the computer (14) than those

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recorded by the thickness-measuring probe (12) in a time-frame of similar length during the normal operation and that that the computer (14) takes into account these measured values while providing the statistical values, wherein at least a part of these measured values originate from the storage unit (14), that makes accessible measured values or information derived therefrom to the computer (14), wherein these measured values or information derived therefrom originate from measuring cycles that were recorded in another extrusion process”.

Akasaka teaches the operation for controlling the thickness of extruded film such that during a predetermined time-frame at the start of the extrusion process, measured values or information derived therefrom is made accessible to the computer and that the computer takes into account these measured values while providing the statistical values wherein at least a part of these measured values originate from the storage unit, that makes measured values or information derived therefrom accessible to the computer wherein these measured values or information derived therefrom originate from measuring cycles that were recorded in another extrusion process (pg 25, lines 41 to pg 26, line 7);

The examiner interprets “another extrusion process” to be any extrusion process that differs only in the time at which it was carried out compared to a reference. Akasaka discloses that past time data is stored in a memory and made accessible to the computer

(pg 25, line 49 to pg 26, line 7). The examiner interprets past time data as data from another/previous extrusion processes.

Akasaka does not expressly disclose that the “measured values or information derived therefrom” is taken from “a greater number of measuring cycles than those recorded by the thickness-measuring probe in a time-frame of similar length during the normal operation”. Although the current application provides this limitation, this is an obvious optimization of the prior art. It would be obvious to one of ordinary skill in the art that one may increase the amount of data collected by increasing the number of measuring cycles for which information is collected. The motivation for expanding the amount of data collected over an increased number of measuring cycles is to provide a higher degree of accuracy within the process in order to maintain the film thickness to a predetermined amount therefore rendering the process more efficient (Akasaka, pg 2, line 27). Therefore, based on the teachings of Akasaka it would have been obvious to one of ordinary skill in the art to arrive at the claimed invention.

As for claim 2, Akasaka teaches that the thickness-measuring probe is moved during a predetermined time-frame at the start of the extrusion process (pg 25, lines 47-48); and in doing so determines for each time unit the measured values (pg 25, lines 43-44); and makes these accessible to the computer (pg 25, line 49 to page 26, line 7).

Akasaka does not explicitly disclose that the measuring probe moves “more quickly along the surface of the extruded film(8) than in normal operation” and that the

collected data is thus taken from a “larger number of measuring cycles than the number of measuring cycles used in normal operation”. The fact that the measuring probe moves more quickly is an obvious variant that one of ordinary skill in the art would have known to do or to try. Making the thickness measuring probe move more quickly is an obvious optimization of ranges. The speed at which the thickness measuring probe moves is a result effect variable. By moving the probe faster, one would be able to collect more data from the measuring device in a similar time frame and thus perform the necessary control modifications to correct between the deviations in the measured values compared to the set value in less time than “normal operation” therefore rendering the process more efficient. The motivation to increase the speed at which the probe moves is found in the prior art. Akasaka states that the conventional method has drawbacks in that there is a large dead time for which it takes the thickness measuring probe to reach the end of the film such that it takes time for the corrections to be made by the control system (pg 3, lines 10-23). Moving the probe “more quickly” would be an obvious way to decrease the dead time. Therefore, it would have been obvious to one of ordinary skill in the art to obtain this invention.

As for claims 3 and 8, Akasaka teaches the limitation such that the storage unit makes measured values or information derived therefrom accessible to the computer, which were recorded when the deviations in the film thickness from the target value lay within acceptable tolerances (pg 25, lines 43 to pg 26, line 7).

The prior art offers a broader limitation than that stated in the application. Akasaka teaches that the data from the measuring probe is measured and stored for the range in which the values fall within or do not fall within proximity of the desired target value (pg 25, lines 43-52). The fact that the values may be collected when the difference between the actual thickness and the desired thickness set point lay within “acceptable tolerances” falls within the scope of the prior art.

As for claim 4, 9 and 10, Akasaka teaches that various weighting factors are assigned to the measured values or the information derived therefrom using different measuring cycles with which the contribution of the measured values or of the information derived therefrom to the statistical values is defined (pg 25, lines 56-58).

As for claim 5, Akasaka further teaches that the coefficient which the data is multiplied by is subject to change and therefore teaches that these weighting factors are changed at the start of the extrusion process (pg 27, lines 33-39).

As for claims 6, 11, 12, 13, and 14, Akasaka teaches that the measured values or the information derived therefrom using other extrusion processes stored in the storage device are assigned to the process parameters that prevailed when they were recorded (pg 4, lines 56-58). Akasaka teaches under summary of the invention that the thickness data memory stores thickness data of the film which are measured by the thickness gauge over the whole width of the film and which are thickness data of each portion of the film corresponding to each of the operating terminal devices (pg 4, line 56-58). The examiner

is interpreting thickness data stored in the data memory to included data related the thickness of the film including process parameters and therefore the measured values or information derived therefrom is stored along with corresponding process parameters.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of the applicant's admitted prior art with the teachings of Akasaka to provide an improved method for controlling the thickness of an extruded film.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Akasaka US Patent No. 5038397, 5359532, 4994976; Straumanis US Patent No. 3904338 and Akasaka European Patent No. EP0608918B1.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH ARNADE whose telephone number is (571)270-7664. The examiner can normally be reached on Monday-Friday 9:00-5:00 p.m. EST except alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A./
Examiner, Art Unit 4122

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 4122